

VERSION SHOWING THE CHANGES TO THE CLAIMS  
IN THE CLAIMS

1-33. (cancelled)

Add the following claims:

34. (New) A method of electrical impedance testing of a breast region of a patient, comprising:

applying electrical excitation signals to the patient;  
acquiring electrical signals from the breast region of the patient, through a plurality of elements of a multi-element probe, responsive to the applied signals; and  
determining a single value of an impedance measure of the breast region, responsive to the signals acquired through more than one of the plurality of elements of the probe.

35. (New) A method according to claim 34, comprising displaying the determined value of the impedance measure to a user.

36. (New) A method according to claim 34, wherein signals are acquired through elements of the probe placed on the region and elements of the probe not on the region and wherein the value of the impedance measure is determined based only on signals from elements placed on the region.

37. (New) A method according to claim 34, wherein the value of the impedance measure is determined based only on signals from elements whose values lie within a specified range.

38. (New) A method according to claim 34, wherein determining the single value comprises selecting a sub-group of elements and determining the value based on the selected elements.

39. (New) A method according to claim 38, wherein selecting the sub-group of elements comprises selecting based on the signals acquired through the elements.

40. (New) A method according to claim 38, wherein selecting the sub-group of elements comprises selecting an area of an impedance image.

41. (New) A method according to claim 38, wherein the value of the impedance measure is determined based only on signals from elements whose values are not among the highest or lowest values of all the elements.

42. (New) A method according to claim 38, wherein the value of the impedance measure is determined based only on signals from elements whose values are not indicative of contact problems.

43. (New) A method according to claim 34, wherein the region for which the value of the impedance measure is determined comprises a region chosen by a user.

44. (New) A method according to claim 34, comprising generating an impedance map of the region responsive to the acquired signals and wherein determining the single value of the impedance measure comprises determining for a region of pixels of the impedance map.

45. (New) A method according to claim 34, comprising comparing the single value of the impedance measure of the breast region to a value of a reference region.

46. (New) A method according to claim 34, wherein values of the impedance measure are determined separately for each of the plurality of the probe elements used in determining the single value, and wherein the single impedance measure is determined as a function of the impedance measure of the plurality of elements.

47. (New) A method according to claim 46, wherein the single impedance measure for the region is determined as a maximum of the impedance measure of the plurality of elements.

48. (New) A method according to claim 34, wherein acquiring the electrical signals comprises acquiring through a flat multi-element probe in which substantially all the

elements are oriented in a same direction.

49. (New) A method according to claim 34, wherein acquiring the electrical signals comprises acquiring through a multi-element probe including a rectangular matrix of elements.

50. (New) A method according to claim 34, wherein the impedance measure comprises a phase.

51. (New) A method according to claim 34, wherein the impedance measure comprises a polychromatic measure.

52. (New) Apparatus for electrical impedance testing of a breast region of a patient, comprising:

- an electrode for providing electrical signals to the patient;
- a multi-element probe for acquiring electrical signals from the patient, through a plurality of elements, responsive to the provided signals; and
- a processor adapted to determine a single value of an impedance measure of the breast region, responsive to signals acquired through more than one of the plurality of elements of the probe from the region.

53. (New) Apparatus according to claim 52, comprising a display for providing the determined value of the impedance measure, to a user.

54. (New) Apparatus according to claim 52, comprising a controller adapted to acquire signals through elements of the probe placed on the region and elements of the probe not on the region and wherein the processor determines the value of the impedance measure based only on signals from elements placed on the region.

55. (New) Apparatus according to claim 52, comprising an input interface adapted to receive a user indication of the region for which the value of the impedance measure is determined.

56. (New) Apparatus according to claim 52, wherein the processor is adapted to generate an impedance map of the region responsive to the acquired signals and to determine the single value of the impedance measure for a region of pixels of the impedance map.
57. (New) Apparatus according to claim 52, wherein the processor is adapted to compare the single value of the impedance measure of the breast region to a value of a reference region.
58. (New) Apparatus according to claim 52, wherein the processor is adapted to determine values of the impedance measure separately for each of the plurality of the probe elements used in determining the single value, and to determine the single impedance measure as a function of the impedance measure of the plurality of elements.
59. (New) Apparatus according to claim 58, wherein the processor is adapted to determine the single impedance measure for the region as a maximum of the impedance measure of the plurality of elements.
60. (New) Apparatus according to claim 52, wherein the probe comprises a flat multi-element probe in which substantially all the elements are oriented in a same direction.
61. (New) Apparatus according to claim 52, wherein the probe comprises a multi-element probe including a rectangular matrix of elements.